SEQUENCE LISTING

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<110> Rothman, James
Mayhew, Mark
Hoe, Mee
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<120> KDEL RECEPTOR INHIBITORS

<130> 31488

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<170> FastSEQ for Windows Version 3.0

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<213> rat

<400> 1

Gly Asp Leu Ala Pro Gln Met Leu Arg Glu Leu Gln Glu Thr Asn Ala

1 10 15

Ala Leu Gln Asp Val Arg Glu Leu Leu Arg Gln Gln Val Lys Glu Ile 20 25 30

Thr Phe Leu Lys Asn Thr Val Met Glu Cys Asp Ala Cys Gly 35 40 45

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<400> 2

Ser Asp Leu Gly Pro Gln Met Leu Arg Glu Leu Gln Glu Thr Asn Ala 1 5 10 15

Ala Leu Gln Asp Val Arg Asp Trp Leu Arg Gln Gln Val Arg Glu Ile 20 25 30

Thr Phe Leu Lys Asn Thr Val Met Glu Cys Asp Ala Cys Gly 35 40 45

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<213> mouse

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1 5 10 15

Ile Leu Val Glu Leu Arg Asp Asp Ile Arg Asp Gln Val Lys Glu Met

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Ser Phe Leu Arg Asn Thr Ile Ala Glu Cys Gln Ala Cys Gly
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      <213> xenopus laevis
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Gly Asp Val Ser Arg Gln Leu Ile Gly Gln Ile Thr Gln Met Asn Gln
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Met Leu Gly Glu Leu Arg Asp Val Met Arg Gln Gln Val Lys Glu Thr
Met Phe Leu Arg Asn Thr Ile Ala Glu Cys Gln Ala Cys Gly
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Gln Lys Leu Gln Asn Leu Phe Ile Asn Phe Cys Leu Ile Leu Ile Cys
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Leu Leu Ile Cys Ile Ile Val Met Leu Leu
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 Thr Leu Gln Asp Ile Val Leu His Leu
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 Gly Leu His Cys Tyr Glu Gln Leu Val
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Pro Leu Lys Gln His Phe Gln Ile Val
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Val Arg Ala Glu Gly Ser Ser Leu Gly Gly Asp Leu Ala Pro Gln Met
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Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln Asp Val Arg Glu
                            40
Leu Leu Arg Gln Gln Val Lys Glu Ile Thr Phe Leu Lys Asn Thr Val
                        55
Met Glu Cys Asp Ala Cys Gly Met Gln Pro Ala Arg Thr Pro Gly Thr
Ser Pro Gln Pro Gln Pro Lys Pro Gln Pro Gln Pro Gln Pro
                                    90
Lys Pro Gln Pro Lys Pro Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys
                                105
Asp Glu Leu
        115
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cgggccgagg gatccagcct gggtggagac ctagccccac agatgcttcg agaactccag
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gagactaatg cggcgctgca agacgtgaga gagctcttgc gacagcaggt caaggagatc
                                                                      180
accttcctga agaatacggt gatggaatgt gacgcttgcg gaatgcagcc cgcacgcacc
                                                                      240
cccggtacta gtccgcagcc gcagccgaaa ccgcagccgc agccgcagcc gcagccgaaa
                                                                      300
ccgcagccga aaccggaacc ggaaggtacc ggatcatcag aaaaagatga gttgtaggcg
                                                                      360
gccgcagaat tccatatgca tctcgag
                                                                      387
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                                    10
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 Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln Asp Val Arg Glu
                             40
Leu Leu Arg Gln Gln Val Lys Glu Ile Thr Phe Leu Lys Asn Thr Val
Met Glu Cys Asp Ala Cys Gly Met Gln Pro Ala Arg Thr Pro Gly Thr
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Ser Pro Gln Pro Gln Pro Lys Pro Gln Pro Gln Pro Gln Pro
Lys Pro Gln Pro Lys Pro Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys
                                 105
Asp Glu Leu
        115
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cgggccgagg gatccagcct gggtggagac tgttgtccac agatgcttcg agaactccag
                                                                       120
gagactaatg cggcgctgca agacgtgaga gagctcttgc gacagcaggt caaggagatc
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accttcctga agaatacggt gatggaatgt gacgcttgcg gaatgcagcc cgcacgcacc
                                                                       240
cccggtacta gtccgcagcc gcagccgaaa ccgcagccgc agccgcagcc gcagccgaaa
                                                                       300
ccgcagccga aaccggaacc ggaaggtacc ggatcatcag aaaaagatga gttgtaggcg
                                                                       360
gccgcagaat tccatatgca tctcgag
                                                                       387
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Met Gly Lys Phe Thr Val Val Ala Ala Ala Leu Leu Leu Gly Ala
                                    10
Val Arg Ala Glu Gly Ser Ser Leu Gly Gly Asp Cys Cys Lys Ala Leu
            20
                                25
Val Thr Gln Leu Thr Leu Phe Asn Gln Ile Leu Val Glu Leu Arg Asp
                            40
Asp Ile Arg Asp Gln Val Lys Glu Met Ser Leu Ile Arg Asn Thr Ile
Met Glu Cys Gln Val Cys Gly Pro Gln Pro Gln Pro Lys Pro Gln Pro
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75

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Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro Glu Pro Glu Gly
Thr Gly Ser Ser Glu Lys Asp Glu Leu
            100
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cgggccgagg gatccagcct gggtggagac tgttgtaagg cattggtcac ccagctcacc
                                                                      120
ctcttcaacc agatcctagt ggagcttcgg gacgacatcc gagaccaggt gaaggaaatg
                                                                      180
tcactcatcc ggaacaccat catggagtgt caggtgtgcg gtccgcagcc gcagccgaaa
                                                                      240
ccgcagccgc agccgcagcc gcagccgaaa ccgcagccga aaccggaacc ggaaggtacc
                                                                      300
ggatcatcag aaaaagatga gttgtaggcg gccgcagaat tccatatgca tctcgag
                                                                      357
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Val Arg Ala Glu Gly Ser Ser Leu Gly Gly Asp Cys Cys Gly Glu Gln
Thr Lys Ala Leu Val Thr Gln Leu Thr Leu Phe Asn Gln Ile Leu Val
                            40
Glu Leu Arg Asp Asp Ile Arg Asp Gln Val Lys Glu Met Ser Leu Ile
                       55
Arg Asn Thr Ile Met Glu Cys Gln Val Cys Gly Pro Gln Pro Gln Pro
Lys Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro
                                    90
Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
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catctcgag

<223> chimeric mouse TSP3-KDEL

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300

360

369

ccgcagccga aaccgcagcc gcagccgcag ccgcagccga aaccgcagcc gaaaccqqaa

ccggaaggta ccggatcatc agaaaaagat gagttgtagg cggccgcaga attccatatg

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Ala Ala Lys Lys Gly Ser Ser Leu Gly Gly Asp Cys Cys Ser Asp Leu
                                 25
Gly Pro Gln Met Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln
                             40
Asp Val Arg Asp Trp Leu Arg Gln Gln Val Arg Glu Ile Thr Phe Leu
Lys Asn Thr Val Met Glu Cys Asp Ala Cys Gly Pro Gln Pro Gln Pro
                    70
                                        75
Lys Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro
                                     90
Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
            100
                                 105
      <210> 24
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gctgccaaaa aaggatccag cctgggtgga gactgttgtt cagacctggg cccgcagatg
                                                                       120
cttcgggaac tgcaggaaac caacgcggcg ctgcaggacg tgcgggactg gctgcggcag
                                                                       180
caggicaggg agatcacgit cctgaaaaac acggigatgg agigtgacgc gigcgggccg
                                                                       240
cageegeage egaaacegea geegeageeg cageegeage egaaacegea geegaaaceg
                                                                       300
gaaccggaag gtaccggatc atcagaaaaa gatgagttgt aggcggccgc agaattccat
                                                                       360
atgcatctcg ag
                                                                       372
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      <211> 90
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      <223> chimeric human PLB-KDEL
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Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Ala Val Cys Ser

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Ala Ala Lys Lys Gly Ser Ser Leu Gly Gly Asp Cys Cys Gln Lys Leu
Gln Asn Leu Phe Ile Asn Phe Cys Leu Ile Leu Ile Cys Leu Leu
Ile Cys Ile Ile Val Met Leu Leu Pro Gln Pro Gln Pro Lys Pro Gln
                        55
Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro Glu Pro Glu
                    70
                                        75
Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
                85
      <210> 26
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gctgccaaaa aaggatccag cctgggtgga gactgttgtc aaaagctaca gaatctattt
                                                                      120
atcaatttct gtctcatctt aatatgtctc ttgctgatct gtatcatcgt gatgcttctc
                                                                      180
ccgcagccgc agccgaaacc gcagccgcag ccgcagccgc agccgaaacc gcagccgaaa
                                                                      240
ccggaaccgg aaggtaccgg atcatcagaa aaagatgagt tgtaggcggc cgcagaattc
                                                                      300
catatgcatc tcgag
                                                                      315
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      <211> 109
      <212> PRT
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                                    10
Ala Ala Lys Lys Gly Ser Ser Leu Gly Gly Asp Cys Cys Gly Glu Gln
                                25
Thr Lys Ala Leu Val Thr Gln Leu Thr Leu Phe Asn Gln Ile Leu Val
Glu Leu Arg Asp Asp Ile Arg Asp Gln Val Lys Glu Met Ser Leu Ile
                        55
                                            60
Arg Asn Thr Ile Met Glu Cys Gln Val Cys Gly Pro Gln Pro Gln Pro
                    70
                                        75
Lys Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro
Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
            100
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gtcacccage teaccetett caaccagate etagtggage ttegggaega cateegagae
caggtgaagg aaatgtcact catccggaac accatcatgg agtgtcaggt gtgcggtccg
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                                    10
Ala Ala Lys Lys Gly Ser Ser Leu Gly Gly Asp Cys Cys Gly Asp Phe
                                25
Asn Arg Gln Phe Leu Gly Gln Met Thr Gln Leu Asn Gln Leu Leu Gly
Glu Val Lys Asp Leu Leu Arg Gln Gln Val Lys Glu Thr Ser Phe Leu
                        55
                                           . 60
Arg Asn Thr Ile Ala Glu Cys Gln Ala Cys Gly Pro Gln Pro Gln Pro
                    70
                                        75
Lys Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro
                                    90
                                                        95
Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
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60

120

180

240

300

360

372

60

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gctgccaaaa aaggatccag cctgggtgga gactgttgtg gggactttaa ccggcagttc
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caggitaagg aaacatcatt titgcgaaac accatagctg aatgccaggc tigcggtccg
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Tyr Thr Ser Glu Lys Asp Glu Leu
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Leu Asn Tyr Phe Asp Asp Glu Leu
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                 5
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Met Gly Lys Phe Thr Val Val Ala Ala Leu Leu Leu Leu Gly Ala
                                    10
Val Arg Ala Glu Gly Ser Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
                                25
Tyr His Pro Asn Ser Thr Cys Gly Ser Ser Leu Gly Gly Asp Cys Cys
                            40
Pro Gln Met Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln Asp
                        55
```

120

180

240

300

360

372

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Val Arg Glu Leu Leu Arg Gln Gln Val Lys Glu Ile Thr Phe Leu Lys
Asn Thr Val Met Glu Cys Asp Ala Cys Gly Met Gln Pro Ala Arg Thr
                 85
Pro Gly Thr Ser Pro Gln Pro Gln Pro Lys Pro Gln Pro Gln
                                 105
Pro Gln Pro Lys Pro Gln Pro Lys Pro Glu Pro Glu Gly Thr Gly Ser
        115
                             120
Ser Glu Lys Asp Glu Leu
    130
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cgggccgagg gatccgaaca aaaacttatt tctgaagaag acttgtacca cccaaactca
                                                                       120
acatgcggat ccagcctggg tggagactgt tgtccacaga tgcttcgaga actccaggag
                                                                       180
actaatgcgg cgctgcaaga cgtgagagag ctcttgcgac agcaggtcaa ggagatcacc
                                                                       240
ttcctgaaga atacggtgat ggaatgtgac gcttgcggaa tgcagcccgc acgcaccccc
                                                                       300
ggtactagtc cgcagccgca gccgaaaccg cagccgcagc cgcagccgca gccgaaaccg
                                                                       360
cagccgaaac cggaaccgga aggtaccgga tcatcagaaa aagatgagtt gtaggcggcc
                                                                       420
gcagaattcc atatgcatct cgag
                                                                       444
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      <212> PRT
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Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
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